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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,889	01/21/2004	Jochen Straehle	10191/3525	5444

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EXAMINER

DETSCHEL, MARISSA

ART UNIT PAPER NUMBER

2877

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/762,889		STRAEHLE, JOCHEN	
	<b>Examiner</b>		<b>Art Unit</b>	
	Marissa J. Detschel		2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/21/04 5/20/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10302055.1, filed on January 21, 2003 in Germany.

### ***Information Disclosure Statement***

The information disclosure statements filed on January 21, 2004, and May 20, 2004 have been fully considered by the examiner.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Interferometric measuring device utilizing an active optical element."

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2, and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sonehara et al. (USPN 6,381,015).

Regarding claim 1, Sonehara discloses an interferometric measuring device comprising:

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a short coherence light source for emitting light (1) (column 4, lines 11-14);

a beam splitter (3), the emitted light being guided to the beam splitter, the beam splitter producing an object beam (41) which is directed via an object beam path to the object (7) and a reference beam (40) which is directed via a reference beam path to a reference surface (4) (column 4, lines 14-17 and 27-33);

an image recorder (9) for recording the light reflected back by the object surface and by the reference surface and combined for interference (column 4, lines 33-36);

an evaluation device for determining surface shape (column 4, lines 24-26 and Abstract lines 10-26); and

at least one active optical element (15) that may be influenced by at least one of an electrical field and a magnetic field (10), the optical element being situated in at least one of the object beam path (41) and the reference beam path, the optical element being adapted to change an optical path length of an object light path in relation to an optical path length of a reference light path for depth scanning (column 9, lines 2-14).

Regarding claim 2, Sonehara's optical element is an electro-optical element (column 9, line 2-5).

In regards to claim 4, a non-homogeneous electric field is applied to the at least one active optical element of Sonehara for a controlled deformation of a relevant wavefront (column 9, lines 2-5).

Regarding claim 5, the at least one optical element of Sonehara's device has a non-homogeneous optical density for influencing a wavefront in a controlled manner (column 9, lines 2-5). The use of the electric field being applied to the element for a

controlled deformation of a wavefront creates a non-homogeneous optical density in the active optical element.

In regards to claim 6, Sonehara's device comprises at least one optical element that includes at least one of a lens, lens system, a part of a lens system, and at least a part of a light-diverting optical media (2,6,8).

***Allowable Subject Matter***

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

As to claim 3, the prior art of record, taken alone or in combination, fails to disclose or render obvious the use of a second active optical element in a beam path of an interferometric measuring device for color or image error correction, along with the rest of the limitations of claim 3.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa J. Detschel whose telephone number is 571-272-2716. The examiner can normally be reached on M-F 8:30am-5:00pm.

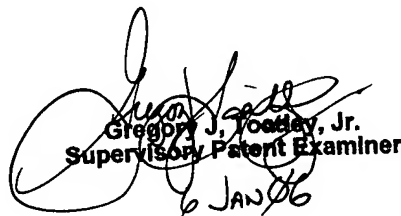
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571-272-2059. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa J Detschel  
January 6, 2006  
MJD

  
Gregory J. Yostley, Jr.  
Supervisory Patent Examiner  
6 JAN 06